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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,876	02/23/2004	Hirotsugu Shirakawa	016891-0864	7095

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FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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GILES, NICHOLAS G

ART UNIT	PAPER NUMBER
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2622

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/782,876	<b>Applicant(s)</b> SHIRAKAWA, HIROTSUGU	
	<b>Examiner</b> Nicholas G. Giles	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/23/04, 05/01/06</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-2, 4, and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Prater et al. (U.S. Patent No. 6,509,927).

Regarding claim **1**, Prater et al. discloses:

A first electronic zooming means for zooming in or out a picture of an object by hardware (skipping pixels and lines from the sensor array); a second electronic zooming means for zooming in or out a picture of an object by software (repeating pixels and lines or interpolation); a control unit for controlling the first and the second electronic zooming means (8:65-9:5); a display (3:15-17); and an operation key section (5:33-35).

The preamble is not given patentable weight since the claim limitations can stand alone without the preamble and does not reference the preamble.

Regarding claim **2**, see the rejection of claim 1 and note that Prater et al. further discloses:

First and the second electronic zooming means select a picture of a predetermined scale factor respectively (8:65-9:5, magnification or shrink factors).

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Regarding claim 4, see the rejection of claim 2 and note that Prater et al. further discloses:

Scale factor of the selectable pictures is adjustable (8:65-9:5).

Regarding claim 17, Prater et al. discloses:

Zooming in or out a picture by a first electronic zooming means based on hardware (8:65-9:5, skipping pixels and lines from the sensor array); zooming in or out a picture by a second electronic zooming means based on software (8:65-9:5, repeating pixels and lines or interpolation).

The preamble is not given patentable weight since the claim limitations can stand alone without the preamble and does not reference the preamble.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prater et al.

Regarding claim 3, see the rejection of claim 1 and note that Prater et al. is silent with regards to the number of pictures that the first electronic zooming means can select is less than what the second electronic zoom means can select. Official Notice is taken that it was well known at the time the invention was made that interpolation can be done

to any amount of zooming means, thus any number of picture selection. An advantage to doing so is that a preferable interpolated sized picture can be selected for a users purpose instead of being limited to certain sizes. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater's camera include the number of pictures that the first electronic zooming means can select is less than what the second electronic zoom means can select.

Note that the number of lines and pixels that can be skipped limits the number of pictures the first zooming means can select.

Regarding claim 5, see the rejection of claim 2 and note that Prater et al. is silent with regards to having a cross-shaped operation key. Official Notice is taken that it was well known at the time the invention was made to have cross-shaped operation keys. An advantage to a cross-shaped operation key is that the key can select more than one function as compared to a button key with a single position when pressed. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include a cross-shaped operation key.

5. Claims **6-9 and 11-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Prater et al. in view of Kitamura et al. (U.S. Pub. No. 2005/0157174).

Regarding claim 6, see the rejection of claim 1 and note that Prater et al. is silent with regards to a first and second housing coupled by a hinge section to form a foldable terminal. Kitamura et al. discloses this in ¶0053. An advantage to this setup is that when folded the terminal is shorter lengthwise and will fit into a pocket or other carrying

means easier. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include a first and second housing coupled by a hinge section to form a foldable terminal.

Regarding claim 7, see the rejection of claim 6 and note that Kitamura et al. further discloses:

A sensor that outputs an output value corresponding to an angle between the first housing and the second housing (¶0054, the camera senses the open or closed angle of the casings and controls the camera terminal accordingly).

Kitamura et al. discloses in ¶0054 that an advantage to this setup is that when closed the main display can be shut off thus conserving power. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include a detecting the angle between the first and second housing.

Regarding claim 8, see the rejection of claim 7 and note that Kitamura et al. further discloses that the zooming means operates according to the value of the sensor in ¶0054. This is shown by the fact that when the casings are closed the power supply of the main display is shut off and therefore the zooming means cannot operate on the main terminal. Whereas when the casings are open the main display is turned on and can display an image that can be zoomed. An advantage to this setup is that power required for an unnecessary operation can be conserved by not operating the zooming means. For this reason it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have Prater include at the zooming means operates according to the value of the sensor.

Regarding claim 9, see the rejection of claim 7 and note that Kitamura et al. further discloses that the zooming means operates according to the value of the sensor in ¶0054. This is shown by the fact that when the casings are closed the power supply of the main display is shut off and therefore the zooming means cannot operate on the main terminal. Whereas when the casings are open the main display is turned on and can display an image that can be zoomed. An advantage to this setup is that power required for an unnecessary operation can be conserved by not operating the zooming means. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include at the zooming means operates according to the value of the sensor.

Regarding claim 11, see the rejection of claim 1 and note that Prater et al. is silent with regards to a display located on the front side of the terminal. Kitamura et al. discloses this in ¶0054. Kitamura et al. discloses in ¶0054 that an advantage to having this is that information such as present time, mail content, or images can be displayed. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater et al. include a display located on the front side of the terminal.

Regarding claim 12, see the rejection of claim 6 and note that Kitamura et al. further discloses a display located on the rear side of the terminal in ¶0054 and ¶0074 and Figs. 1A-1C. Kitamura et al. shows in ¶0107-0108 that an advantage to this is that

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the image being photographed can be displayed on the sub-display, which the user can view. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater et al. include a display located on the rear side of the terminal.

Regarding claim **13**, see the rejection of claim 6 and note that Kitamura et al. further discloses that the foldable terminal is a portable telephone in ¶0088. An advantage to this is that a user doesn't require a separate camera but instead can have one device that contains both camera and phone functions as Kitamura shows in ¶0135-0136 by using a picture to show who is calling. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater et al. include the foldable terminal is a portable telephone.

6. Claim **10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Prater et al. in view of Kitamura et al. in further view of Nagasawa (U.S. Pub. No. 2004-0077386).

Regarding claim **10**, see the rejection of claim 7 and note that Prater et al. and Kitamura et al. are silent with regards to a magnet in one housing and a magnet sensor in the other. Nagasawa discloses this in ¶0035. Nagasawa discloses in ¶0036 that an advantage to including a magnet is that the device can be controlled in different manners depending on the detection signal from the magnet sensor. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater et al. modified by Kitamura et al. include a magnet in one housing and a magnet sensor in the other.



7. Claims **14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Prater et al. in view of Stavely (U.S. Patent No. 7,098,949).

Regarding claim **14**, see the rejection of claim 1 and note that Prater et al. is silent with regards to using a nearest neighbor method. Stavely discloses this in 1:16-39. An advantage to using a nearest neighbor method is that anti-aliasing does not occur in the process. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include using a nearest neighbor method.

Regarding claim **15**, see the rejection of claim 1 and note that Prater et al. is silent with regards to using a bi-linear method. Stavely discloses this in 1:16-39. An advantage to using a bi-linear method is that it provides relatively smooth edges with hardly any jaggies. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include using a bi-linear method.

Regarding claim **16**, see the rejection of claim 1 and note that Prater et al. is silent with regards to using a bi-cubic method. Stavely discloses this in 1:16-39. An advantage to using a bi-cubic method is that it provides relatively smooth edges with hardly any jaggies. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Prater include using a bi-cubic method.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas G. Giles whose telephone number is (571) 272-2824. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7273. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGG



LIN YE  
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